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Substitute for form 1449A/PTO				Complete If Known Application Number: 09/523,990 Filing Date: March 13, 2000 First Named Inventor: <b>MOU-SHIUNG LIN</b> Art Unit: 2887 Examiner Name: <b>DANIEL I. WALSH</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)					
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US PATENT DOCUMENTS					
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	1	MISTRY, K. et al. "A 45nm Logic Technology with High-k Metal Gate Transistors, Strained Silicon, 9 Cu Interconnect Layers, 193nm Dry Patterning, and 100% Pb-free Packaging," IEEE International Electron Devices Meeting (2007) pgs. 247-250				
	2	EDELSTEIN, D.C., "Advantages of Copper Interconnects," Proceedings of the 12th International IEEE VLSI Multilevel Interconnection Conference (1995) pgs. 301-307				
	3	THENG, C. et al. "An Automated Tool Deployment for ESD (Electro-Static-Discharge) Correct-by-Construction Strategy in 90 nm Process," IEEE International Conference on Semiconductor Electronics (2004) pgs. 61-67				
	4	GAO, X. et al. "An improved electrostatic discharge protection structure for reducing triggering voltage and parasitic capacitance," Solid-State Electronics, 27 (2003), pgs. 1105-1110				
	5	YEOH, A. et al. "Copper Die Bumps (First Level Interconnect) and Low-K Dielectrics in 65nm High Volume Manufacturing," Electronic Components and Technology Conference (2006) pgs. 1611-1615				
	6	HU, C-K. et al. "Copper-Polyimide Wiring Technology for VLSI Circuits," Materials Research Society Symposium Proceedings VLSI V (1990) pgs. 369-373				
	7	ROESCH, W. et al. "Cycling copper flip chip interconnects," Microelectronics Reliability, 44 (2004) pgs. 1047-1054				
	8	LEE, Y-H. et al. "Effect of ESD Layout on the Assembly Yield and Reliability," International Electron Devices Meeting (2006) pgs. 1-4				

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	9	YEOH, T-S. "ESD Effects On Power Supply Clamps," Proceedings of the 6th International Symposium on Physical & Failure Analysis of Integrated Circuits (1997) pgs. 121-124	
	10	EDELSTEIN, D. et al. "Full Copper Wiring in a Sub-0.25 µm CMOS ULSI Technology," Technical Digest IEEE International Electron Devices Meeting (1997) pgs. 773-776	
	11	VENKATESAN, S. et al. "A High Performance 1.8V, 0.20 µm CMOS Technology with Copper Metallization," Technical Digest IEEE International Electron Devices Meeting (1997) pgs. 769-772	
	12	JENEL, S. et al. "High Q Inductor Add-on Module in Thick Cu/SiLK™ single damascene," Proceedings from the IEEE International Interconnect Technology Conference (2001) pgs. 107-109	
	13	GROVES, R. et al. "High Q Inductors in a SiGe BiCMOS Process Utilizing a Thick Metal Process Add-on Module," Proceedings of the Bipolar/BiCMOS Circuits and Technology Meeting (1999) pgs. 149-152	
	14	SAKRAN, N. et al. "The Implementation of the 65nm Dual-Core 64b Merom Processor," IEEE International Solid-State Circuits Conference, Session 5, Microprocessors, 5.6 (2007) pgs. 106-107, pg. 590	
	15	KUMAR, R. et al. "A Family of 45nm IA Processors," IEEE International Solid-State Circuits Conference, Session 3, Microprocessor Technologies, 3.2 (2009) pgs. 58-59	
	16	BOHR, M. "The New Era of Scaling in an SoC World," International Solid-State Circuits Conference (2009) Presentation Slides 1-66	
	17	BOHR, M. "The New Era of Scaling in an SoC World," International Solid-State Circuits Conference (2009) pgs. 23-28	
	18	INGERLY, D. et al. "Low-K Interconnect Stack with Thick Metal 9 Redistribution Layer and Cu Die Bump for 45nm High Volume Manufacturing," International Interconnect Technology Conference (2008) pgs. 216-218	
	19	KURD, N. et al. "Next Generation Intel® Micro-architecture (Nehalem) Clocking Architecture," Symposium on VLSI Circuits Digest of Technical Papers (2008) pgs. 62-63	
	20	MALONEY, T. et al. "Novel Clamp Circuits for IC Power Supply Protection," IEEE Transactions on Components, Packaging, and Manufacturing Technology, Part C, Vol. 19, No. 3 (07-1996) pgs. 150-161	

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Substitute Disclosure Statement Form (PTO-1449)

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	21	GEFFKEN, R. M. "An Overview of Polyimide Use in Integrated Circuits and Packaging," Proceedings of the Third International Symposium on Ultra Large Scale Integration Science and Technology (1991) pgs. 667-677	
	22	LUTHER, B. et al. "Planar Copper-Polyimide Back End of the Line Interconnections for ULSI Devices," Proceedings of the 10th International IEEE VLSI Multilevel Interconnection Conference (1993) pgs. 15-21	
	23	MASTER, R. et al. "Ceramic Mini-Ball Grid Array Package for High Speed Device," Proceedings from the 45th Electronic Components and Technology Conference (1995) pgs. 46-50	
	24	MALONEY, T. et al. "Stacked PMOS Clamps for High Voltage Power Supply Protection," Electrical Overstress/Electrostatic Discharge Symposium Proceedings (1999) pgs. 70-77	
	25	LIN, M.S. et al. "A New System-on-a-Chip (SOC) Technology - High Q Post Passivation Inductors," Proceedings from the 53rd Electronic Components and Technology Conference (05-30-2003) pgs. 1503-1509	
	26	MEGIC CORP. "MEGIC way to system solutions through bumping and redistribution," (Brochure) (02-06-2004) pgs. 1-3	
	27	LIN, M.S. "Post Passivation Technology™ - MEGIC® Way to System Solutions," Presentation given at TSMC Technology Symposium, Japan (10-01-2003) pgs. 1-32	
	28	LIN, M.S. et al. "A New IC Interconnection Scheme and Design Architecture for High Performance ICs at Very Low Fabrication Cost - Post Passivation Interconnection," Proceedings of the IEEE Custom Integrated Circuits Conference (09-24-2003) pgs. 533-536	

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